



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION
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ORLANDO, FLORIDA 32826-3224

IN REPLY REFER TO:
J&A-16-0179

JUSTIFICATION AND APPROVAL
FOR USE OF OTHER THAN FULL AND OPEN COMPETITION

1. Contracting Activity.

Naval Air Warfare Center Training Systems Division (NAWC-TSD) Orlando, FL

2. Description of the Action Being Approved.

This is a Sole Source (Brand Name) justification for the negotiation and issuance of an open market order under the authority of Subpart 13.5 to acquire Supermicro computer parts and CISCO network switches. The resultant order will be a Firm Fixed Price via open market.

3. Description of Supplies/Services.

This procurement is to upgrade five Submarine Piloting and Navigation Trainers (SPAN) and five Virtual Environment Submarine Trainers (VESUB) to run the Periscope Simulation (PSIM) software. NAWCTSD has been directed by Naval Sea Systems Command (NAVSEA) to upgrade our trainers to allow a common image generation system for all the navigation trainers developed by Naval Surface Warfare Center (NSWC), Naval Undersea Warfare Center, and NAWCTSD across all the submarine trainer sites. The total estimated dollar value of the proposed procurement is and is set forth in the table below.

Part Number	Description
	Master Server SPAN
X10SRL-F	Motherboard 1. Single socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 and E5-1600 v3 family 2. Intel® C612 chipset 3. Up to 512GB ECC DDR4 2133MHz LRDIMM; 8x DIMM slots 4. 7x PCI-E slots total: 2 PCI-E 3.0 x8, 2 PCI-E 3.0 x8 (in x16), 2 PCI-E 3.0 x4 (in x8) or 1 x8 + 1 x0 (auto-switch), & 1 PCI-E 2.0 x4 (in x8) 5. Intel® i210 Dual port GbE LAN 6. 10x SATA3 (6Gbps) via C612 7. 1x VGA, 2x COM, 1x TPM 8. 4x USB 3.0 ports, 8x USB 2.0 ports 9. 2x SuperDOM with built-in power
E5-2650v3	Intel® Xeon® Processor E5-2650 v3 (25M Cache, 2.30 GHz) FC-LGA12A
Samsung M393A2G40DB0-CPB	SAMSUNG 16GB 288-Pin DDR4 SDRAM ECC Registered DDR4 2133 (PC4 17000) Server Memory
Intel BXSTS200C	Thermal Solution LGA2011 CPU Cooler
Seagate Constellation ES.3 ST1000NM0033	Seagate Constellation ES.3 ST1000NM0033 1TB 7200 RPM Internal Hard Drive
EVGA GeForce GT 730	EVGA GeForce GT 730 02G-P3-2738-KR Graphics Card

INTELX520-DA2	INTEL - 10 GIGABIT ETHERNET SERVER ADAPTER INTELX520-DA2 – Network Adapter – PCI Express
LG Electronics WH16NS40	Super Multi Blue - Disk drive - BDXL
EVGA GeForce GTX 970	EVGA GeForce GTX 970 04G-P4-1972-KR
Xeon E5-1630v3	Intel CPU CM8064401614501 Xeon E5-1630v3
Samsung 850 EVO	Samsung 850 EVO MZ-75E250B/AM 2.5" 250GB SATA III
C7X99-OCE	Motherboard 1. The C7X99-OCE/C7X99-OCE-F Motherboard supports a single Intel® Core™ i7 processor, in an LGA 2011-3 socket 2. Direct Media Interface (up to 10 Gb/s transfer, Full Duplex) 3. PCI Express Interface (up to 5.0 GT/s for Gen2 and 8.0 GT/s for Gen3) 4. SATA Controller (up to 6Gb/sec) 5. 64GB of Unbuffered (UDIMM) DDR4 non-ECC 2133~3000(OC) MHz in 8 memory slots
Intel Core i7-5960X	Intel CPU
Micron MTA8ATF5126AZ-2G1A1	4GB Micron DDR4 1.2V-2133
EVGA GeForce GT 960	EVGA GeForce GT 960 Graphic Card – 1.13 GHz Core-1.18 GHz Boost
WS-C2960X-48LPD-L	CISCO (Switch)- 48 POE + Ethernet Ports & 2 SFP + Ports
WD6001FFWX	WESTERN-DIGITAL RED PRO 6TB 3.5" 64MB SATA6 INT D/REG
SYDS1515P	SYNOLOGY DISKSTATION DS1515+ 5-BAY NAS SERVER/REG
Supermicro snk-p0050ap4	Super Micro 4U active LGA2011 CPU Cooler for X9 Socket R WS
Raritan MCCAT28-UST	Raritan KVM 8 input and one user station

4. Statutory Authority Permitting Other Than Full and Open Competition.

41 U.S.C. 1901, Simplified acquisition procedures (Certain Commercial Items).

5. Rationale Justifying Use of Cited Statutory Authority.

The PSIM software was developed by Naval Surface Warfare Center (NSWC). The PSIM software has been designed and tested on a specific platform and the technical requirements of the hardware must be met to insure the proper navigation training. This allows for commonality of training and also reduces the overall cost in development of visual databases for the trainers. Additionally, the Brand Named items used to build the Supermicro computers are in current use in the SPAN and VESUB trainer and have shown to meet the reliability and maintainability requirements. The specific designed SuperMicro computers are required to match the computers used by NSWC to allow functionality for the designed software and for configuration management. Maintaining same design also allows for commonality for ease of trainer maintenance and reduces mean-time-to-repair. Besides the brand name requirement for building

the Supermicro computers, the Cisco Network Switch has been designated by NSWC as the approved network switch for the communications between the IG computers and the master computer. To authorize any other items would cause additional cost and time to receive IT approval delaying necessary training for the Sailor.

6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable.

Market Research was conducted when the NAWCTSD Lab bought the hardware for the development unit. We purchased the hardware and built the computers and understand the costs from the actuals that we spent.

The proposed contract will be posted to FEDBIZOPS through the Navy's portal (NECO) to solicit as many offerors practicable.

7. Determination of Fair and Reasonable Cost.

The Contracting Officer shall ensure that all supplies provided under this purchase order are procured at fair and reasonable price in accordance with FAR 13.106.3(a): Basis for award. The Supermicro computers and the Cisco Network Switch are available from hundreds of companies that resale the brand name items. This allows the Government to make sure the items are priced properly and the Government gets a fair price.

8. Actions to Remove Barriers to Future Competition.

It is economically prudent for the government to match the existing computers and network switch both at NSWC and in the NAWC trainers. If, in the future, the navigation trainer's image generation hardware/software is redesigned and computers are up-graded due to becoming obsolete, the computers can be replaced. NAWCTSD Undersea CMMI Program will assess whether competition of non-brand name computers for future requirements is feasible for each Lab and trainer.